

BALDOR • RELIANCE

Customer information packet

SPM2515T

20HP, 1775RPM, 3PH, 60HZ, 256T, 3976M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM WEEE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	24.000 A @ 460.0 V 48.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a

Part detail

Revision	C
Type	AC
Mech. spec.	39E761
Base	
Status	PRD/A
Elec. spec.	39WGY451
Layout	39LYE761
Eff. date	05-03-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	09-05-2023

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3976M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.21 IN
Power Factor	84
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

AC Induction Motor Performance Data

Record # 96322

Typical performance - not guaranteed values

Winding: 39WGY451-R001		Type: 3976M	Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	59.41 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	48/24	Breakdown Torque	230 LB-FT		
R.P.M.	1775	Pull-up Torque	89.8 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	129 LB-FT	
NEMA Design Code	A	KVA Code	J	Starting Current	188 A
Service Factor (S.F.)	1.15	No-load Current	9.77 A		
NEMA Nom. Eff.	94.1	Power Factor	84	Line-line Res. @ 25°C	0.287 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	31°C	
S.F. Amps			Temp. Rise @ S.F. Load	37°C	
			Locked-rotor Power Factor	29.4	
			Rotor inertia	3.32 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	69	79	84	86	87	85
Efficiency	90	93	94	94	93	93	93.4
Speed	1794	1789	1782	1776	1769	1761	1772
Line amperes	11.34	14.62	18.96	23.86	29.08	34.76	27

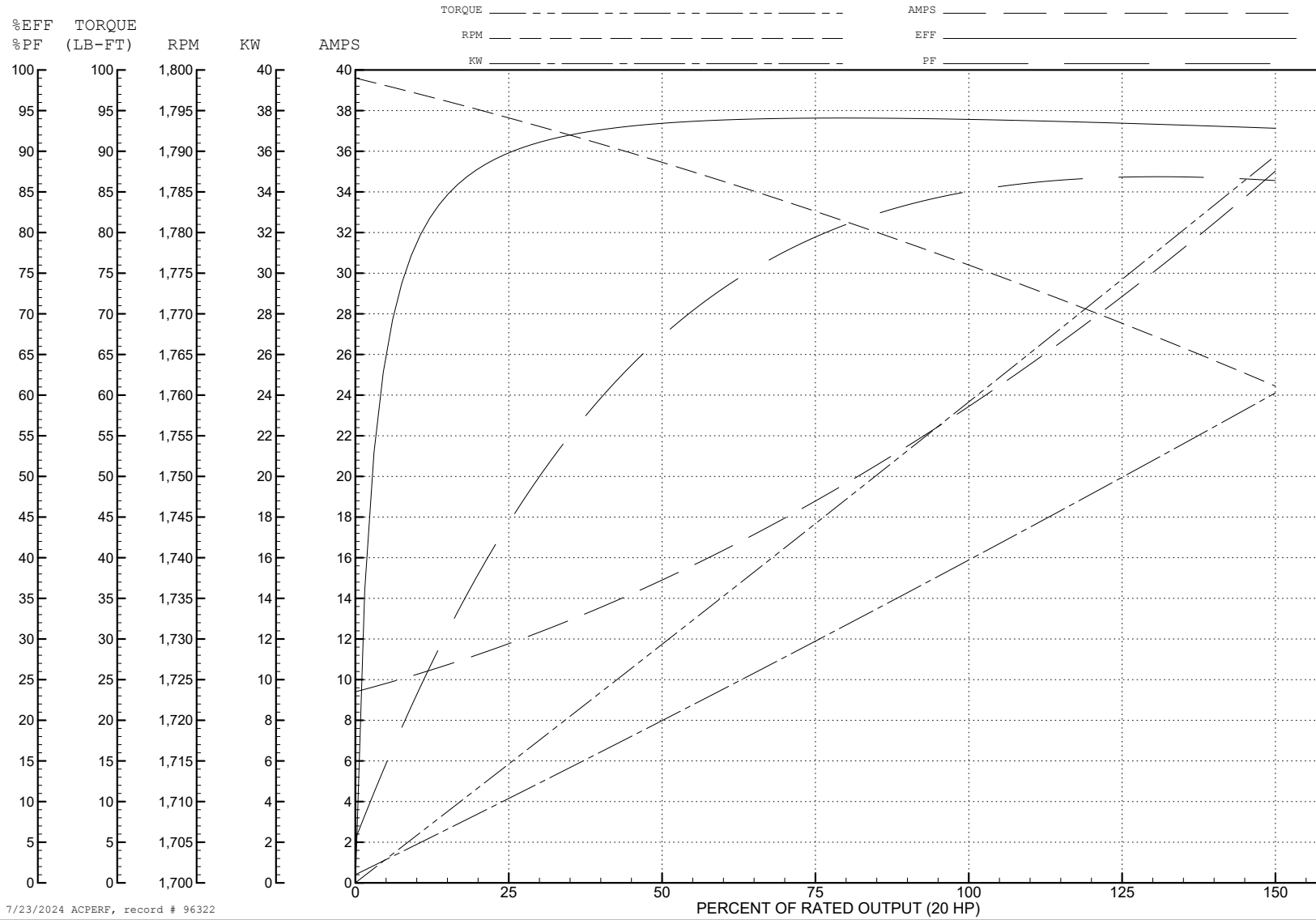
ABB Motors and Mechanical Inc.

WINDING # 39WGY451

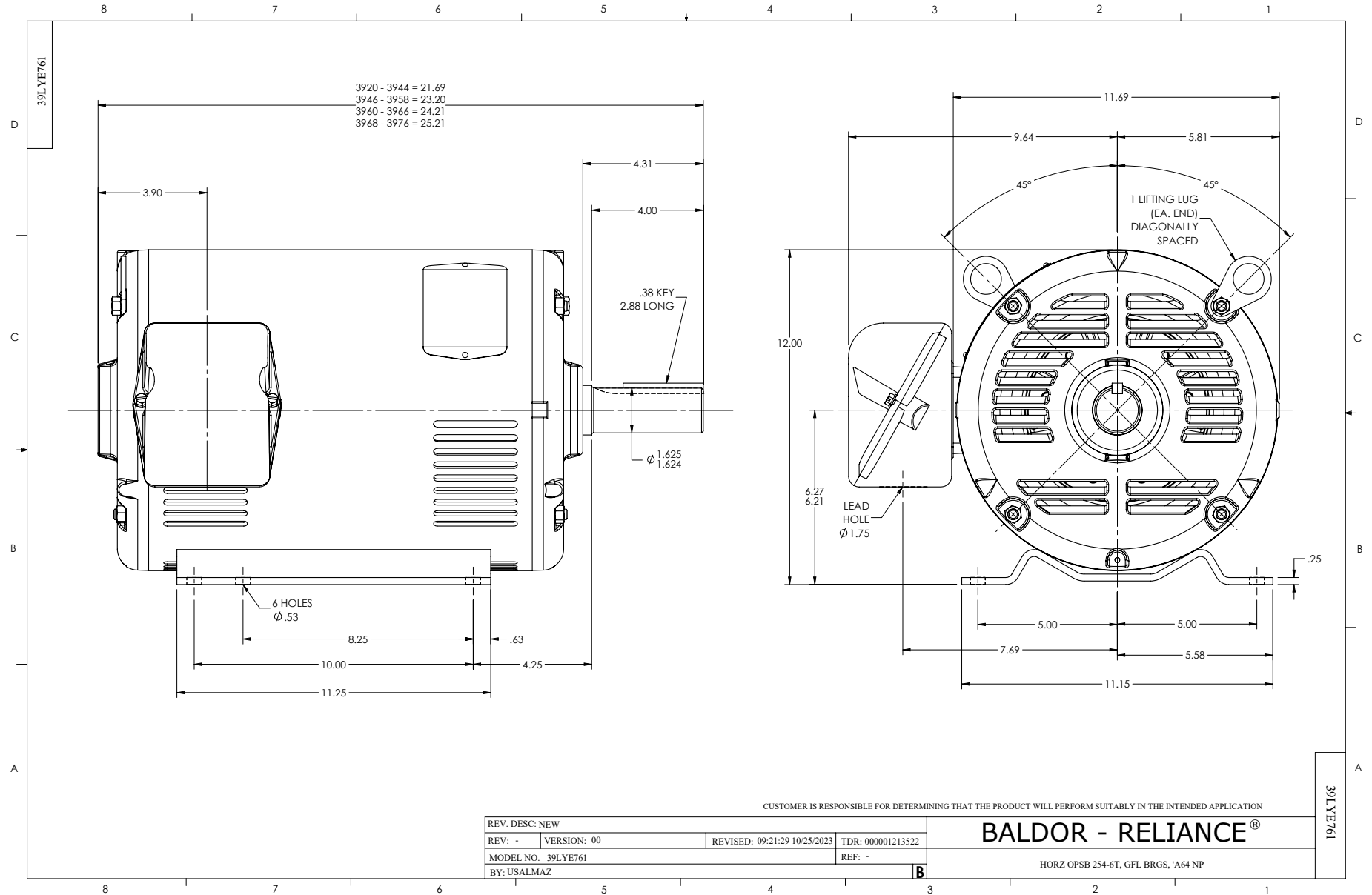
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1775 RPM 460 V 3976M

TORQUES (LB-FT): PO=230 PU=89.8 LR=129 LRA=188



7/23/2024 ACPERF, record # 96322



CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1